

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

What is claimed is:

1-16. (cancelled)

17. (currently amended) A method of providing Quality of Service (QoS) prioritization for wireless network stations in a network, said method comprising:

establishing a priority polling list comprising an identifier for at least a first wireless network station for which communication priority is desired;

polling said priority polling list to determine whether said at least a first wireless network station identified on said priority polling list is ready to communicate on said network;

granting priority access to communicate over said network to said at least a first wireless network station, wherein said priority access gives said at least a first wireless network station priority over another wireless network station excluded from said priority polling list;

scheduling, wherein said scheduling compromises receiving priority requests from stations and adding stations to said priority polling list upon request; sending a priority change notice to a station to indicate bandwidth is available and, upon acknowledgement from said station, increasing a priority level of said station to provide higher bandwidth to said station, when bandwidth is available.

18. (canceled)

19. (canceled)

20. (canceled)

21. (canceled)

22. (canceled)

23. (canceled)

24. (previously presented) An apparatus for providing Quality of Service (QoS)

prioritization for wireless network stations in a network, said apparatus

comprising:

a priority polling list comprising an identifier for at least a first wireless network station for which communication priority is desired;

a polling unit for polling stations on said priority polling list to determine whether said at least a first wireless network station identified on said priority polling list is ready to communicate on said network;

a coordinator for granting priority access to communicate over said network to said at least a first wireless network station, wherein said priority access gives said at least a first wireless network station priority over another wireless network station excluded from said priority polling list;;

a bandwidth monitor for monitoring bandwidth availability;

a scheduler for scheduling, wherein said scheduling comprises receiving priority requests from stations and adding stations to said priority polling list upon request;

a priority manager for sending a priority change notice to a station to indicate bandwidth is available and, upon acknowledgement from said station, increasing a priority level of said station to provide higher bandwidth to said station, when bandwidth is available.

25. (new) A method of providing Quality of Service (QoS) prioritization for at least one wireless network station in a network, said method comprising:

providing a coordination function that controls access to a network comprising wireless network stations, said controlled access occurring during a contention-free period;

providing a polling list comprising identifiers for a first group of said wireless network stations in said network;

providing a priority polling list comprising identifiers for a second group of said wireless network stations in said network, said second group consisting of stations for which communication priority is desired through a multi-level priority hierarchy in which more frequent access is granted to higher priority stations;

polling said wireless network stations with identifiers included in said priority polling list to determine whether said wireless network stations in said second group have information to communicate; and

granting network communication access, through said coordination function, to said wireless network stations within said second group that have information to communicate.